

METRIC

A-A-20264A

December 12, 2001

A-A-20264

July 31, 1997

COMMERCIAL ITEM DESCRIPTION

MACARONI AND CHEESE, FROZEN

The U.S. Department of Agriculture (USDA) has authorized the use of this Commercial Item Description.

1. SCOPE. This Commercial Item Description (CID) covers frozen macaroni and cheese, packed in commercially acceptable containers, suitable for use by Federal, State, local governments, and other interested parties.

2. PURCHASER NOTES.

2.1 Purchasers *shall specify* the following:

- Type(s) of cheese, fat content, macaroni product(s), sodium content, container size(s), and packaging material(s) required (Sec. 3).
- The ratio of cheese substitute for Type of cheese II (Sec. 3).
- When analytical requirements are different than specified (Sec. 6.1).
- When analytical requirements need to be verified (Sec. 6.2).
- Manufacturer's/distributor's certification (Sec. 10.2) or USDA certification (Sec. 10.3).

2.2 Purchasers *may specify* the following:

- When the cheeses used for the frozen macaroni and cheese is to be graded or inspected by the Dairy Grading Branch, Dairy Programs (DP), Agricultural Marketing Service (AMS), USDA (Sec. 9).
- Manufacturer's quality assurance (Sec. 10.1 with 10.1.1) or (Sec. 10.1 with 10.1.2).
- Packaging requirements other than commercial (Sec.11).

3. CLASSIFICATION. The frozen macaroni and cheese shall conform to the following list which shall be specified in the solicitation, contract, or purchase order.

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Types of cheese, cheese substitute ratio, fat content, macaroni products, sodium content, container sizes, and packaging materials.

Type of cheese I - 100 % natural cheese

Type of cheese II - Natural cheese and cheese substitute

Cheese substitute ratio A - 80% natural cheese, 20% cheese substitute

Cheese substitute ratio B - 50% natural cheese, 50% cheese substitute

Cheese substitute ratio C - Other

Fat content 1 - Less than 17.0 g per 227 g (8 ounce) serving

Fat content 2 - Less than 20.0 g per 227 g (8 ounce) serving

Fat content 3 - Other

Macaroni product a - Enriched macaroni products made from wheat semolina
(21 CFR § 139.115)

Macaroni product b - Enriched macaroni products with fortified protein made from wheat
semolina (21 CFR §139.117)

Macaroni product c - Macaroni products made from wheat semolina (21 CFR § 139.110)

Macaroni product d - Enriched macaroni products (21 CFR § 139.115)

Macaroni product e - Enriched macaroni products with fortified protein
(21 CFR § 139.117)

Macaroni product f - Macaroni products (21 CFR § 139.110)

Sodium content (1) - Less than 1,000 mg per 227 g (8 ounce) serving

Sodium content (2) - Less than 1,400 mg per 227 g (8 ounce) serving

Sodium content (3) - Other

Container size (a) - 227 g (8 ounce) individual serving

Container size (b) - 298 g (10.5 ounce) individual serving

Container size (c) - Multiple servings (check with your supplier for the number of servings per
container)

Container size (d) - Other

Packaging material (i) - Aluminum tray

Packaging material (ii) - Polymeric tray

Packaging material (iii) - Pouch (boil in a bag)

Packaging material (iv) - Other

4. MANUFACTURER’S/DISTRIBUTOR’S NOTES. Manufacturer’s/distributor’s products shall meet the requirements of the:

- Salient characteristics (Sec. 5).
- Analytical requirements: *as specified by the purchaser* (Sec. 6).
- Manufacturer’s/distributor’s product assurance (Sec. 7).
- Regulatory requirements (Sec. 8).
- Quality assurance provisions: *as specified by the purchaser* (Sec. 9 and 10).
- Packaging requirements other than commercial: *as specified by the purchaser* (Sec. 11).

5. SALIENT CHARACTERISTICS.

5.1 Processing. The frozen macaroni and cheese shall be prepared in accordance with good manufacturing practices (21 CFR Part 110).

5.2 Ingredients. The frozen macaroni and cheese shall consist of macaroni, cheese sauce, spices, and safe and suitable thickeners.

5.2.1 Macaroni products. The macaroni products shall comply with the U.S. Food and Drug Administration (FDA) Standard of Identity for Macaroni Products (21 CFR § 139.110), Enriched Macaroni Products (21 CFR § 139.115), or Enriched Macaroni Products with Fortified Protein (21 CFR § 139.117). When specified in the solicitation, contract, or purchase order the macaroni shall be prepared from wheat semolina.

5.2.2 Cheese sauce. The cheeses used in the cheese sauce shall comply with the FDA Standard of Identity for Cheeses and Related Cheese Products (21 CFR Part 133) or as specified in CID A-A-20208, Cheese, Cheddar, Reduced, Fat 1/. The cheese sauce shall contain Cheddar cheese (21 CFR § 133.113) or in CID A-A-20208, Cheese, Cheddar, Reduced, Fat; thickeners, flavorings (natural and/or artificial), and appropriate spices, including salt. Other cheeses such as, but not limited to: American (21 CFR § 133.123 and 21 CFR § 133.169), Blue (21 CFR § 133.106), Granular (21 CFR § 133.144), Romano (21 CFR § 133.183), Swiss (21 CFR § 133.195), and Club (21 CFR § 133.123) may be used. Other spices common to cheese sauces, annatto, paprika, beta carotene, and FD&C colors may be used.

1/ Reduced fat Cheddar cheese should contain between 25 to 33.3 percent less fat than that of Cheddar cheese and complies with all applicable Federal regulations including those contained in 21 CFR § 133.113 for Cheddar cheese, 21 CFR § 101.62 for nutrient content claims for fat, and 21 CFR § 130.10 for foods named by use of a nutrient content claim and standardized term.

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5.2.2.1 Substitute cheese. When specified by the purchaser, substitute cheese may be combined with the cheese in a ratio designated by the purchaser. The substitute cheese shall have the same nutritional value as the natural cheese being substituted. The substitute cheese shall have the same quality requirements of the natural cheese being substituted. The substitute cheese shall have no off odors or flavors.

5.3 Finished product. The finished macaroni and cheese shall show no evidence of excessive heating (materially scorched).

5.3.1 Appearance. The reheated macaroni and cheese shall be well blended. The overall appearance shall not be mushy, pasty, and have excessive oil separation from the product. There shall be no foreign color to the product.

5.3.2 Odor and flavor. The reheated macaroni and cheese shall have an odor and flavor characteristic of prepared macaroni and cheese. There shall be no foreign odors or flavors such as, but not limited to, burnt, scorched, stale, rancid, or moldy.

5.3.3 Texture. When reheated, the texture of the macaroni shall not be rubbery, mushy, or pasty. The cheese sauce consistency shall not be excessively thin, thick, or pasty.

5.3.4 Foreign material. All ingredients shall be clean, sound, wholesome, and free from evidence of rodent or insect infestation.

5.4 Shelf life. Unless otherwise specified in the solicitation, contract, or purchase order, the macaroni and cheese shall have a shelf life, when stored at -17.8°C (0°F) or lower, of at least 12 months from the date of manufacturing.

6. ANALYTICAL REQUIREMENTS.

6.1 Analytical requirements. Unless otherwise specified in the solicitation, contract, or purchase order, the analytical requirements for the frozen macaroni and cheese shall be as follows:

6.1.1 Monosodium glutamate content. The monosodium glutamate content of the frozen macaroni and cheese shall not exceed 1.0 percent per 227 g (8 ounces) of finished product.

6.1.2 Fat content. The fat content of the frozen macaroni and cheese shall not exceed the limit specified by the purchaser in the solicitation, contract, or purchase order.

6.1.3 Sodium content. The sodium content of the frozen macaroni and cheese shall not exceed the limit specified by the purchaser in the solicitation, contract, or purchase order.

6.2 Product verification. When USDA verification of analytical requirements is specified in the solicitation, contract, or purchase order, the following procedures will be followed. Analytical testing shall be performed on a composite sample. The composite sample shall be 454 grams (1 pound) and prepared from subsamples drawn from randomly selected containers. The number of subsamples used to create the composite sample shall be based on USDA procedures.

6.3 Analytical testing. When specified in the solicitation, contract, or purchase order, analyses shall be made in accordance with the following methods from the Official Methods of Analysis of the AOAC International:

<u>Test</u>	<u>Method</u>
Sample preparation	983.18(b)
Monosodium glutamate	970.37
Fat	925.12
Sodium	969.23 <u>2/</u>

2/ Dry ashing and flame emission procedures are to be used.

6.4 Test results. The test results for monosodium glutamate shall be reported to the nearest 0.1 percent. The test results for fat content shall be reported to the nearest 0.1 gram. The test results for sodium content shall be reported to the nearest milligram. Any result not conforming to the analytical requirements shall be cause for rejection the lot.

7. MANUFACTURER’S/DISTRIBUTOR’S PRODUCT ASSURANCE. The manufacturer/distributor shall certify that the frozen macaroni and cheese provided shall meet the salient characteristics of this CID, conform to their own specifications, standards, and quality assurance practices, and be the same frozen macaroni and cheese offered for sale in the commercial market. The purchaser reserves the right to require proof of conformance.

8. REGULATORY REQUIREMENTS. The delivered frozen macaroni and cheese shall comply with all applicable Federal and State mandatory requirements and regulations relating to the preparation, packaging, labeling, storage, distribution, and sale of the frozen macaroni and cheese within the commercial marketplace. Delivered frozen macaroni and cheese shall comply with all applicable provisions of the Federal Food, Drug, and Cosmetic Act, the Fair Packaging and Labeling Act, and regulations promulgated thereunder.

9. QUALITY ASSURANCE PROVISIONS FOR THE CHEESES. Purchaser shall specify in the solicitation, contract, or purchase order when the following provisions shall be met.

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9.1 Manufacturer's quality assurance. When required in the solicitation, contract, or purchaser order, the cheese manufacturer shall be required to have their facilities inspected by DP, AMS, USDA, and be eligible for listing in Section I of the AMS publication "Dairy Plants Surveyed and Approved for USDA Grading Service." (An AMS, DP plant survey verifies that, at the time of the survey, the manufacturer produces products in a clean, sanitary environment and satisfactorily meets the requirements contained in 7 CFR Part 58 General Specification for Dairy Plants Approved for USDA Inspection and Grading Service.)

9.2 USDA, DP certification. When required in the solicitation, contract, or purchase order, the DGB, DP, AMS, USDA, shall certify that the cheeses used for the manufacturing of frozen macaroni and cheese meets or exceeds the requirements of the Standard of Identity for Cheeses and Related Cheese Products (21 CFR Part 133) and the CID for Reduced Fat Cheddar Cheese, A-A-20208. The DGB inspectors shall certify the cheeses in accordance with DGB procedures which include random sampling of the cheeses; evaluating the samples for conformance with the appropriate U.S. Standards for Grade and/or CID; and documenting the requirements on official DGB certificates.

10. QUALITY ASSURANCE PROVISIONS. *For finished product, the purchaser shall specify 10.2 or 10.3; purchaser may specify 10.1 with 10.1.1 or 10.1 with 10.1.2.*

10.1 Manufacturer's quality assurance. When required in the solicitation, contract, or purchase order, the product manufacturer shall be required to provide evidence, by certificate, that the manufacturing plant has undertaken one of the following quality assurance measures within 12 months prior to providing a bid, or no later than 10 business days from the date of awarding of the contract. Failure to provide this documentation within the proper time frame may result in the contract being terminated for cause.

10.1.1 Plant systems audit. A plant systems audit (PSA) conducted by USDA, AMS, or other third party auditing service is required within 12 months prior to the date of the awarding of the contract. *(An AMS PSA verifies the manufacturer's capability to produce products in a clean, sanitary environment in accordance with Title 21 Code of Federal Regulations Part 110 - Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food; and have in place an internal quality assurance program. The AMS PSA determines the manufacturer's ability to produce under this CID, if the products of interest are identified at the time of the PSA.)*

10.1.2 Plant survey. A plant survey conducted by USDA, AMS, or other third party auditing service is required within 12 months prior to the date of the awarding of the contract. *(An AMS plant survey audit verifies that, at the time of the survey, the manufacturer produces products in a clean, sanitary environment in accordance with Title 21 Code of Federal Regulations Part 110 - Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food.)*

10.2 Manufacturer's/distributor's certification. When required in the solicitation, contract, or purchase order, the manufacturer/distributor will certify that the prepared frozen macaroni and cheese distributed meets or exceeds the requirements of this CID.

10.3 USDA certification. When required in the solicitation, contract, or purchase order that product quality and acceptability or both be determined, the Processed Products Branch (PPB), Fruit and Vegetable Programs (FVP), AMS, USDA, shall be the certifying program. PPB inspectors shall certify the quality and acceptability of the prepared frozen macaroni and cheese in accordance with PPB procedures which include selecting random samples of the prepared frozen macaroni and cheese, evaluating the samples for conformance with the salient characteristics of this CID and other contractual requirements, and documenting the findings on official PPB score sheets and/or certificates. In addition, when required in the solicitation, contract, or purchase order, PPB inspectors will examine the prepared frozen macaroni and cheese for conformance to the United States Standards for Condition of Food Containers in effect on the date of the solicitation.

11. PACKAGING. Preservation, packaging, packing, labeling, and case marking shall be as specified in the solicitation, contract, or purchase order.

12. USDA INSPECTION NOTES. When Section 10.3 is specified in the solicitation, contract, or purchase order, USDA certification shall include evaluation of the quality and condition of samples of packaged prepared frozen macaroni and cheese, and compliance with requirements in the following areas:

- Salient characteristics (Sec. 5).
- Analytical requirements *when specified in the solicitation, contract, or purchase order* (Sec. 6.1). When USDA analytical testing is specified PPB inspection personnel shall select samples and submit them to the USDA, Science and Technology Programs (S&TP) laboratory for analysis.
- Packaging requirements (Sec. 11 or as specified in the solicitation, contract, or purchase order).

13. REFERENCE NOTES.

13.1 USDA certification contacts.

13.1.1 Macaroni and cheese certification. For USDA certification of the frozen macaroni and cheese, contact the **Branch Chief, PPB, FVP, AMS, USDA, STOP 0247, 1400 Independence Avenue, SW, Washington, DC 20250-0247, telephone (202) 720-4693, Fax (202) 690-1527, or via E-mail: james.rodeheaver@usda.gov.**

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13.1.2 Cheese certification. For USDA certification of the cheeses, contact the **Branch Chief, DGB, DP, AMS, USDA, STOP 0230, 1400 Independence Ave., SW, Washington, DC 20250-0230**, telephone (202) 720-7471 or on the Internet at: www.ams.usda.gov/dairy/grade.htm.

13.2 Analytical testing and technical information. For USDA technical information on analytical testing, contact the **Branch Chief, Technical Service Branch, S&TP, AMS, USDA, STOP 0272, 1400 Independence Avenue, SW, Washington, DC 20250-0272**, telephone (202) 690-0621, or via E-mail: anita.okrend@usda.gov.

13.3 Sources of documents.

13.3.1 Sources of information for nongovernmental documents are as follows:

Copies of the Official Methods of Analysis of the AOAC International may be obtained from: **AOAC International, 481 North Frederick Avenue, Suite 500, Gaithersburg, MD 20877**, telephone (202) 924-7077. Internet address: <http://www.aoac.org>.

13.3.2 Sources of information for governmental documents are as follows:

Applicable provisions of the General Specification for Dairy Plants Approved for USDA Inspection and Grading Service is contained in 7 CFR Part 58. The Fair Packaging and Labeling Act are contained in 16 CFR Parts 500 to 503. The Federal Food, Drug, and Cosmetic Act are contained in 21 CFR Parts 1 to 199. These documents may be purchased from: **Superintendent of Documents, ATTN: New Orders, P.O. Box 371954, Pittsburgh, PA 15250-7954**. Credit card (MasterCard or Visa) purchases may be made by calling the Superintendent of Documents on (202) 512-1800 or on the Internet at: <http://www.access.gpo.gov/nara>.

Copies of the Dairy Plants Surveyed and Approved for USDA Grading Service are available from: **Branch Chief, DGB, DP, AMS, USDA, STOP 0230, 1400 Independence Ave., SW, Washington, DC 20250-0230**, telephone (202) 720-7471 or on the Internet at: www.ams.usda.gov/dairy/grade.htm.

Copies of this CID, the United States Standards for Condition of Food Containers, and beneficial comments, recommendations, additions, deletions, clarifications, etc., and any data which may improve this CID are available from and/or provided to: **Head, Food Quality Assurance Staff, FVP, AMS, USDA, STOP 0243, 1400 Independence Avenue, SW, Washington, DC 20250-0243**, telephone (202) 720-9939, Fax (202) 690-0102, via E-mail: FQAStaff@usda.gov or on the Internet at: www.ams.usda.gov/fv/fvqual.htm.

Military activities should submit requests for copies of this CID to: **Standardization Documents Order Desk, Document Automation and Production Service, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.**

MILITARY INTERESTS:

Military Coordinating Activity

Army - GL

Custodians

Army - GL

Navy - SA

Air Force - 35

Review Activities

Army - MD, QM

Navy - MC

DLA - SS

CIVIL AGENCY COORDINATING ACTIVITIES:

DOJ - BOP

HHS - NIH, IHS,

USDA - FV

VA - OSS

PREPARING ACTIVITY:

USDA - FV

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